

Amendments to the Drawings under 37 C.F.R. 1.121(d)

There are no amendments to the drawings at this time.

Remarks/Arguments

Upon entry of this Amendment, claims 1, 8, 11-15, 17, 20, 25-26, 29-35, and 85-95, will be pending. Claims 27-28, 41-71, 82-84 have been withdrawn by the Examiner. Claims 16, 18, 19, 21-24, and 36-40 are being cancelled in this second amendment without prejudice to or disclaimer of the subject matter therein. Claims 2-7, 9-10, 72-81 were cancelled in the last amendment without prejudice or disclaimer. New claims 87-95 have been added, with basis found in previous claim 7, para. [0202], para. [0198] and elsewhere through the specification. Applicants reserve the right to prosecute the subject matter of the withdrawn and cancelled claims in a continuation, continuation-in-part or divisional application. Support for the amendments can be found throughout the specification, including the original claims, as filed, for example, the combination of a beta-emitter and a gamma-emitter on a non-biodegradable microparticle is found within the original claims and the specifically at para [0222] and [0083], non-radioactive core at [0105], covalent binding at [0091] and [0119], chelate attachment at [0062], dendritic linkage at [0123], terminal functional group at [0135], DOTA at [0167], PAMAM polymers [0139], pharmaceutical at [0202], and lyophilized at [0198].

Election of species

The Examiner is thanked for the search and examination effort. Applicants request rejoinder of claim 27-28 upon indication of allowable subject matter in the claim(s) from which they depend.

1. 35 USC 103(a)

Applicants have significantly amended the claims to further define the invention over the art of record (Burns 7,276,254) in view of Schwartz (2004/0197264). In particular, the following claimed subject matter was *not* rejected as anticipated by Burns in view of Schwartz: claims 20, 25-26, and 29.

Firstly, although Burns might appear to disclose nearly every aspect of polymeric microspheres, that does not mean that these disclosures are enabling. Disclosing lists of polymers, functional groups, additives, co-polymers, colorants, pigments, dyes, co-polymers and monomers, halogens, therapeutics, bioactives, disinfectants, and nearly every category of active,

does not mean that Burns is an enabling reference in the context of the presently amended claims. In fact, precisely because Burns discloses all over the place, means that the burden required by law under 103(a) has not been carried by the Office.

Second, on a technical level, Burns discloses an emulsion-aggregation process. Burns discloses pigment dispersion (throughout the particle) not a coated particle having a linked chelated agent. Burns does not disclose a diagnostic. Burns does not disclose the combination of a beta-emitting radiotherapeutic and a gamma-emitting radiodiagnostic.

Schwartz does not remedy the deficiencies of Burns. Schwartz discloses a microsphere impregnated with a radioisotope that emits therapeutic beta-particles and a radioisotope that emits diagnostic gamma-radiation (Abstract). However, Schwartz is concerned with glass microspheres that are “impregnated”. Applicant’s are neither glass nor are impregnated. Applicants were aware of these pioneering efforts. Radioactive glass spheres date back to 1947 para. [0008], radioactive Yttrium-90 microspheres had a leaching problem para. [0012], or had difficulties with being rendered useless due to a half-life that did not work with the time to manufacture/deliver.

Burns in view of Schwartz does not disclose a non-radioactive core, but rather the opposite. Burns in view of Schwartz does not disclose a covalent polymer coating with covalent linking to a metal chelate complex. Schwartz does not teach modifying Burns to achieve the claimed invention, nor does Schwartz teach which parts of the Burns polymer catalog that may or may not be a successful avenue for further research.

2. 35 USC 103(a)

Wu-Danthi-Lugade do not remedy the deficiencies of Burns in view of Schwartz as a reference. Wu discloses linking to antibodies, not modifying Burns in view of Schwartz to achieve the claimed invention. Further, it is immaterial that Danthi and Lugade disclose dendrimer linkages as applicants are not claiming to have invented this linkage and disclose at para. [0122] that dendrimer linking carriers have been described in the prior art. There is no motivation in Wu to suggest the combination with Burns in view of Schwartz to achieve the presently claimed invention, any more than there is motivation to impregnate an antibody with

disinfectant (an example of a possibility in this combination). Numerous examples of inoperative combinations can be drawn from any number of patents. Wu does not address polymers, Wu does not address the combination of beta and gamma emitters, Wu does not address covalent polymer linkers.

Further, even if all of these references were combined, the teaching would not teach each and every element of the claimed invention, in the proper assembly, as is required to sustain a Sec. 103 rejection. Rather, a combination of so many references may merely constitute a box of parts inviting someone to attempt any one of a multitude of non-enabled possibilities. Given the limitations now in the claims, applicants believe that the issue of obviousness no longer applies and request the Examiner to reconsider and withdraw the rejection. However, if the Examiner wishes to discuss this issue or make any suggestions, the undersigned attorney requests a call to expedite prosecution and so this application can move to allowance.

Conclusion

All of the stated grounds for objection and rejection have been properly traversed, accommodated or rendered moot. Applicants, therefore, respectfully request that the Examiner reconsider all presently outstanding rejections and objections and request that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. Prompt and favourable consideration of this Amendment and Reply is respectfully requested.

With best regards,



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